Departmental Findings of Fact and Order Air Emission License After-the-Fact

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

The Air Emission License for Maietta Enterprises, Inc. (Maietta) of West Baldwin, Maine expired on December 15, 2002. Maietta has applied to renew their expired license permitting the operation of emission sources associated with their rock crushing facility. Jaw Crusher #1 and Gen. Set #1 were both licensed previously and additional new equipment is being added on this license. Because they will be operating more equipment Maietta Enterprises has requested an increase to their annual facility fuel limit.

B. Emission Equipment

Rock Crushing Equpiment:

Unit #	Equipment	Powered	Process Rate	Control	Date of	
	Description		(tons/hour)	Device	Manufacture	
1	Jaw Crusher	Electrically	150	Water Sprays	Post 1983	
2	Jaw Crusher	Electrically	150	Water Sprays	Post 1983	
3	Cone Crusher	Electrically	150	Water Sprays	Post 1983	
4	Screen Wash	Electrically	100	Water Sprays	Post 1983	
	Plant					

Electrical Generating Units:

Source ID	Max Capacity (MMBtu/hr)	Max Firing Rate (gal/hr)	Power Output <u>kW</u>	Fuel Type, <u>% sulfur</u>
Gen. Set #1	3.68	26.9	320	diesel, 0.05%
Gen. Set #2	3.68	26.9	320	diesel, 0.05%
Gen. Set #3	3.75	27.4	330	diesel, 0.05%
Gen. Set #4	3.68	26.9	320	diesel, 0.05%

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C. Application Classification

The previous air emission license for Maietta expired on December 15, 2002. A complete application was not submitted on time, therefore Maietta is considered to be an existing source applying for an after-the-fact renewal. The facility is determined to be a minor source and the application has been processed through Chapter 115 of the Department's regulations.

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II. BEST PRACTICAL TREATMENT

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas. BPT for an after-the-fact renewal requires an analysis similar to a Best Available Control Technology analysis per Chapter 115 of the Department's regulations. BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Rock Crushers

Jaw Crushers #1 and #2 and Cone Crusher #3 are portable units which were manufactured in 1986, 2001, and 1999 with rated capacities of 150 tons/hour each. The rock crushers are therefore not subject to EPA New Source performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

The regulated pollutant from the rock crushers is particulate emissions. To meet the requirements of BACT for control of particulate matter (PM) emissions from the rock crushers, Maietta shall operate and maintain water sprays on the rock crushers as needed. Visible emissions from the rock crushers shall be limited to no greater than 10% opacity on a 6-minute block average basis.

C. Diesel Units

Generator Sets #1 - #4 are utilized primarily to provide electrical power to the rock crushers.

A summary of the BACT analysis for Gen. Sets #1 - #4 is the following:

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- 1. The total fuel use for the generators shall not exceed 60,000 gal/year of diesel fuel, based on a 12 month rolling total, with a maximum sulfur content not to exceed 0.05% by weight.
- 2. Chapter 106 regulates fuel sulfur content, however in this case a BPT/BACT analysis for SO₂ determined a more stringent limit of 0.05% was appropriate and shall be used.
- 3. Chapter 103 regulates PM emission limits. The PM₁₀ limits are derived from the PM limits.
- 4. NOx, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
- 5. Visible emissions from each generator shall not exceed 20% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a continuous 3-hour period.

D. Stock Piles and Roadways

Visible emissions from a fugitive emission source shall not exceed 20% opacity, except for no more than 5-minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any 1-hour.

E. Facility Emissions

Maietta shall be restricted to the following annual emissions, based on the firing of 60,000 gallons of diesel fuel with a sulfur content not to exceed 0.05% on a 12 month rolling total:

Total Licensed Annual Emissions for the Facility

(used to calculate the annual license fee)

	PM	PM_{10}	SO_2	NO _x	CO	VOC
Total TPY	0.50	0.50	0.22	13.2	3.5	0.34

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulation Chapter 115, the level of air quality analyses required for a minor new source shall be determined on a case-by-case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

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- will receive Best Practical Treatment;
- will not violate applicable emission standards, and;
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-40-71-D-N, subject to the following conditions:

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions. [MEDEP Chapter 115]
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [MEDEP Chapter 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [MEDEP Chapter 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [MEDEP Chapter 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. § 353. [MEDEP Chapter 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [MEDEP Chapter 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [MEDEP Chapter 115]

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(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [MEDEP Chapter 115]

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- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [MEDEP Chapter 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [MEDEP Chapter 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - 2. pursuant to any other requirement of this license to perform stack testing.
 - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. submit a written report to the Department within thirty (30) days from date of test completion.

[MEDEP Chapter 115]

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
 - A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

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- B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
- C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions. [MEDEP Chapter 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [MEDEP Chapter 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [MEDEP Chapter 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [MEDEP Chapter 115]

SPECIFIC CONDITIONS

(16) Rock Crushers

- A. Maietta shall install and maintain spray nozzles for particulate control on Jaw Crushers #1 and #2 and Cone Crusher #3, and operate them as necessary to limit visible emissions to no greater than 10% opacity on a 6-minute block average basis. [MEDEP Chapters 115 (BPT) and 101]
- B. Maietta shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BPT]

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C. Maietta shall maintain a log detailing and quantifying the hours of operation on a daily basis for all of the rock crushers. The operation log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BPT]

(17) **Diesel Units**

- A. Total fuel use for Gen. Sets #1 #4 shall not exceed 60,000 gal/yr of diesel fuel on a 12-month rolling total and with a maximum sulfur content not to exceed 0.05% by weight. Compliance shall be based on fuel receipts from the supplier showing the type and quantity of fuel delivered and the percent sulfur of the fuel. Records of annual fuel use shall be kept on a 12-month rolling total basis. [MEDEP Chapter 115, BPT]
- B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Gen. Set #1	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)
Gen. Set #2	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)
Gen. Set #3	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)
Gen. Set #4	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)

C. Emissions shall not exceed the following [MEDEP Chapter 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Gen. Set #1	0.45	0.45	0.19	11.78	3.13	0.31
Gen. Set #2	0.45	0.45	0.19	11.78	3.13	0.31
Gen. Set #3	0.45	0.45	0.19	11.78	3.13	0.31
Gen. Set #4	0.45	0.45	0.20	12.00	3.19	0.31

D. Visible emissions from each generator shall not exceed 20% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]

(18) Stockpiles and Roadways

Visible emissions from a fugitive emission source shall not exceed 20% opacity, except for no more than five minutes in any 1-hour period. Compliance shall be

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determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any one hour. [MEDEP Chapter 101]

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(19) **Equipment Relocation** [MEDEP Chapter 115, BPT]

A. Maietta shall notify the Bureau of Air Quality, by a written notification at least 10 days in advance, prior to relocation of any equipment carried on this license. The notification shall be sent to:

Attn: Relocation Notice Maine DEP Bureau of Air Quality 17 State House Station Augusta, ME 04333-0017

The notification shall include the address of the equipment's new location and the license number pertaining to the relocated equipment.

B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.

If less than 10 days is necessary for notification, contact the regional inspector by phone to notify of the upcoming relocation. This phone contact with the regional inspector shall be followed up with a written notice of relocation with the appropriate information.

- (20) Maietta shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order. [MEDEP Chapter 115, BPT]
- (21) Maietta shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605-C).

(22) Payment of Fees

Maietta shall pay the annual air emission license fee within 30 days of December 31st of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 MRSA §341-D, subsection 3.

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(23) Term of License

The term of this order shall be for five (5) years from the signature date below. [MEDEP Chapter 115]

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[MEDEP Chapter 115]		
DONE AND DATED IN AUGUSTA, MAINE THIS	DAY OF	2004.
DEPARTMENT OF ENVIRONMENTAL PROTECTION	Ī	
BY: DAWN R. GALLAGHER, COMMISS		
PLEASE NOTE ATTACHED SHEET FOR GUIDANCE OF		S
Date of initial receipt of application: <u>December 23, 2003</u> Date of application acceptance: <u>January 6, 2004</u>		
Date filed with the Board of Environmental Protection:		

This Order prepared by Rachel E. Pilling, Bureau of Air Quality.